

Many Waters In a Dry State

By Carl D. Riggs

To Oklahomans, the "New Yorker's Map of the U.S.A.," that ludicrous portrayal of the sizes, shapes, and localities of our various states based on an easterner's beliefs and complacency, is ridiculously humorous. New York occupies most of the territory east of the Mississippi; Oklahoma, Texas, and other western and southwestern states are insignificant, misshapen, misplaced, and represented as desert wilderness. But, however absurd it might seem, its burlesque of their geographical knowledge of their country emphasizes the fact that Americans really are geographically ignorant. For a people with the finest communication and transportation systems of any in the world; for a country where there are more people who own or have constant access to autos than those who don't, our lack of knowledge of what our neighbor states have to offer topographically is amazing. And Oklahoma is certainly one of the least known of these United States.

During the first two or three years after moving to Oklahoma, whenever I would visit friends in the midwestern and eastern part of the country, I was asked by the majority of them how long I was going to tolerate the heat, dust, dryness, and monotonous countryside of my new home. In spite of the fact that they were all well-educated, their vision of Oklahoma was one of almost endless, hot, flat, dusty plains covered with wheat fields, oil wells, and bawling, restless cattle. (I must confess that this was my conception of the state until I moved here.) Only a very few could name a river in or near Oklahoma, and lakes were unheard of.

This misconception of what the topography of Oklahoma is like in fact is not too difficult to understand. The songs, legends, and folklore of the state are full of wheat, oil, cattle, and cowboys. American literature of the 1930's made much of the "dust bowl" and the emigration of Oklahomans to greener pastures. The depression hampered extensive pleasure travel and when people did take vacation trips, they went to well-known and well-publicized vacation spots. When the depression ended and the number of tourists increased astronomically, many of them avoided visiting or

even passing through Oklahoma and the so-called dust bowl. Unfortunately, this attitude still exists to some extent.

My inability during my first visit to convince my eastern and midwestern friends of Oklahoma's varied and often beautiful country-side caused me to be certain that on all future visits I was well supplied with hundreds of colored photographs of outdoor Oklahoma.

Showing these pictures produced quite an effect. The soft, green, wooded hills and cool, clear streams of the northeastern Ozark country were attractive. The ruggedness of the Wichita Mountains contrasted with the flat expanse of the Panhandle was surprising. The geology and history of the Arbuckles was interesting to the point of amazement. The mighty forests of the Kiamichi Mountains, among the tallest in the country, were almost unbelievable. But perhaps most impressive of all were the lakes and ponds. Hot, dry, and dusty Oklahoma with well over 100,000 ponds and lakes, and a good number of larger impoundments with surface areas as large as 95,000 acres! Almost incredible!

Strange as it may seem, a large percentage of native Oklahomans are not cognizant of the great number of lakes and ponds now present in Oklahoma and of the extensive surface area of water that these collectively provide. Twenty years ago the total surface area of lakes and ponds in Oklahoma was less than 10,000 acres. At that time 79 small reservoirs had been built by municipal governments for city water supplies, or by the federal government for water conservation and wildlife use. The number of farm ponds was less than 10,000. Between 1930 and 1940, 92 more lakes were built and the number of ponds steadily increased. In the past ten years the rate of lake construction has declined, but the size of new impoundments has increased tremendously, built chiefly through the efforts of the U. S. Army Corp of Engineers. Farm pond construction, however, has continued to increase. At the present time, Oklahoma has approximately 225 lakes and 100,000 farm ponds with the total surface area of more than 300,000 acres. This acreage is proposed to be doubled within the next ten years, and the con-

struction of new lakes is rapidly progressing.

The creation of 300,000 acres of water where there were previously only 10,000 acres is an achievement which has happened so rapidly that only a few are fully aware of it. Few of us realize that almost one-half of the 300,000 acres is contributed by two lakes; Lake Texoma with 95,000 surface acres, and Grand Lake with 46,500 surface acres. Three other lakes are over 5,000 acres in area: Great Salt Plains Reservoir—28,000 acres, Altus-Lugart Reservoir—6,806 acres, and Lake Murray—5,728 acres. On the other hand, about 70 per cent of Oklahoma's lakes are under 100 acres in area.

The creation of so many lakes, especially the larger ones, has been severely criticized. Many arguments against them have been propounded. They are too costly to build. Too much good agricultural land is inundated. The lakes will soon fill with silt and become valueless. When they produce electric power they are competing with private industry, etc. Although there is a small element of truth in each of these objections, the benefits from these lakes far outweigh their detriments. They have many uses of direct and indirect value. They furnish water for irrigation, for stock, for municipal water supply, for industry; they produce hydroelectric power in areas where it did not previously exist; they store excess runoff from heavy rainfall and thus abate floods; they contribute appreciably to the control of soil erosion; they furnish a valuable source of food-fish, and often an industry based on capturing, processing, transporting, and marketing these fish and the products derived from them. But the greatest value of these lakes by far, greater than all other values combined, is the recreation—hunting, boating, swimming, picnicking, the esthetic scenic beauty, and most of all, sport-fishing—which they furnish. The physical and spiritual benefits derived from these types of outdoor recreations are immeasurable. Economically, in actual dollars and cents, the value of such recreation is also impossible to measure; for recreation is likewise an industry, and an exceedingly valuable one.

For a moment let us consider four other states far removed and far different from Oklahoma—Maine, Michigan, Minnesota, and Wisconsin. All are wealthy. All are known for their natural resources, their industry, their agriculture, all are great contributors to the economic welfare of our country. Also, all are great tourist states. Each year, hundreds of thousands of Americans pour into these states and enjoy their scenic and pleasurable natural wonders, particularly their almost countless lakes and the fishing which they afford. Although there are many things to be seen, experienced, and appreciated, the lakes, the streams, and the fishing are the principal attractions. A comparison of the number of out-of-state visitors to the number of out-of-state or nonresident fishing licenses sold provides ample illustration of this.

Oklahoma's now lakes are beginning to function in the same capacity. Oklahomans and people from the surrounding states have quickly learned of the phenomenal fishing and other recreations which many of these lakes offer. More slowly, but steadily, the news is reaching all over the country. As a result, the tourist trade in Oklahoma has risen enormously. All of this cannot be credited to our lakes, but most of it can. For example, in 1948 when Lake Texoma was under the direction of the National Park Service, it was visited by more people than any national park in the country, even including the beautiful, awe inspiring parks of the Rocky Mountains and Pacific northwest. Of course, many of the visitors were Oklahomans, but a great number were from elsewhere. All forty-eight states were represented as well as Mexico, and most of the provinces of Canada. Others of our lakes are also attracting large numbers of tourists, although, not on such a grand scale.

Throughout recorded history, fishing has not only been a valuable source of food, but one of man's most popular sports. Only recently, however, has sport-fishing been seriously considered other than a sport. To-

day it is big business. Back in 1945, Arthur Carhart, in an article in *Nation's Business*, compiled figures showing what an industry sport-fishing had actually become. He showed, for example, that nationally over two billion dollars were spent in that year for hunting and sport-fishing; three-fourths of the amount for the latter. That was more money than was spent for all other forms of sports recreation combined, including professional baseball, college football, horseracing, golf, basketball, tennis, bowling, and other pastimes. Using statistics compiled in 1939 before World War II, when manufactured goods were abundant and available to all, he showed that America's total expenditure for all electric appliances, from electric razors to refrigerators, was only one-fourth of the sport-fishing bill for that year.

Today's statistics on the annual bill for hunting and fishing are even more startling. The total now is about four billion dollars! Again, three-fourths of this goes for fishing. Inflation has contributed appreciably to this increase, but the main cause is that more people are fishing and hunting now than ever before. Since they have more money to spend, they go more often, travel farther, and are better equipped than previously.

Oklahoma is getting her share of this new business, and that share is increasing annually. During the 1950-51 fiscal year, almost one-half million fishing licenses or combined hunting and fishing licenses were sold in Oklahoma; 45,182 of these were nonresident licenses. The revenue from these licenses alone was \$1,033,585.25. Add to the cost of the license, the cost of fishing tackle, bait, boats, motors, outdoor clothes, boots, food and beverages, gasoline, lodgings—the total is in the millions. Kelly Debusk, former director of the Oklahoma Game and Fish Department, took the time to compute the approximate annual value of Oklahoma's sport-fishing. He very conservatively estimated that the average fisherman spent \$135.00 a year just

for fishing. Adding the many who fish without license for various reasons to the number of license buyers, the total expenditure is over seventy million dollars annually! The 1950 value of Oklahoma's three largest industries, oil, cattle, and wheat, was approximately \$407,000,000, \$171,000,000, and \$90,000,000 respectively. In the same year, \$33,390,865 worth of natural gas (Oklahoma is the fourth largest producer in the United States) was sold. Obviously, this puts sport-fishing among the state's most valuable industries. If the lakes to be constructed furnish fishing equal to that in many of our present lakes; if the present excellent fishing which we now have can be maintained; and if better national publicity can be given to our lakes and their fishing, the value of this new industry to Oklahoma will increase considerably and actually rival that of the northern fishing states already mentioned.

And so Oklahoma now has 300,000 acres of water; giant reservoirs for flood control; smaller lakes for cities' drinking water; impoundments for wildlife refuges, for beauty, for fishing, and farm ponds and cattle tanks. They are worth millions of dollars to the state's economy. But I still believe that their greatest assets cannot be measured in economic terms alone. The excitement of a catfish on the end of a willow pole to a schoolboy playing hookey; the color of a sunset over a lake to a passing motorist; the thrill of a flock of geese coming into the wind to a hunter in a blind; the anticipation of the savage strike of a hungry bass to a fisherman; the pleasure of a cool swim on a hot summer day to a group of farm boys; the peacefulness and beauty of moonlight on the water—how can these be measured? Or the closeness of a father to his young son on an early morning hike along the shore; or the companionship of a family together on a spring picnic. And that hookey playing schoolboy with the catfish and the happy, healthy smile—he may be truant, but he is certainly not delinquent!

Data for Degrees

Since the University of Oklahoma Biological Station, Lake Texoma, opened in the summer of 1950, the data in whole or part for five masters' theses, the degrees already conferred, have been collected at the station. Nine candidates for the degree of Master of Science and two Ph. D.'s have done all or part of their research at the station.



About the Author

Carl D. Riggs, born in Indianapolis and educated at the University of Michigan, joined the University faculty in 1949. He is Assistant Professor of Zoology and Acting Director of the Oklahoma Biological Survey. An ichthyologist of the Isaac Walton school, he enjoys catching a fish as much as cutting it up, thus combining happily his profession and his hobby. He spends freely of his ability, energy, and enthusiasm on both. This article was written for the Quarterly.